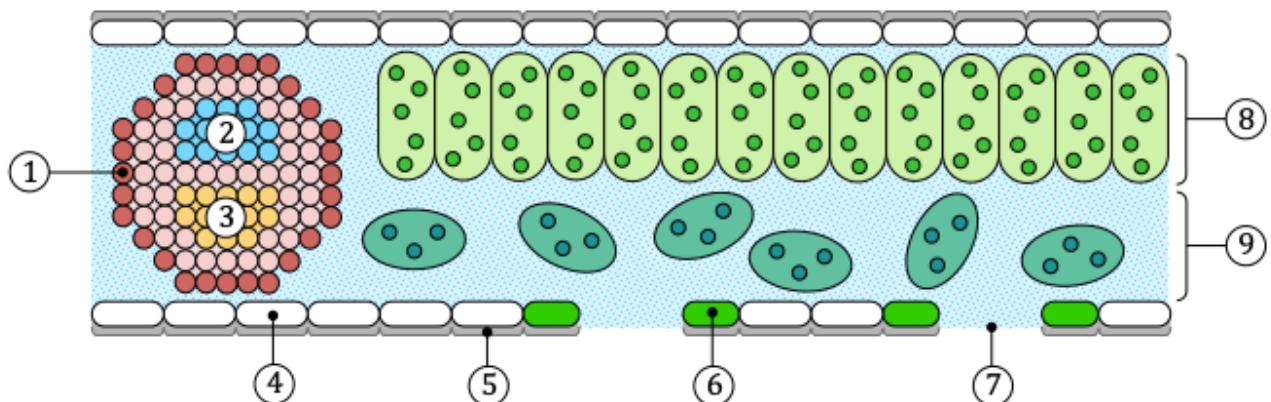


9.1 Transport in the Xylem of Plants

Plant Structure

Label the diagram of the leaf tissue of a plant



1. 4. 7.
2. 5. 8.
3. 6. 9.

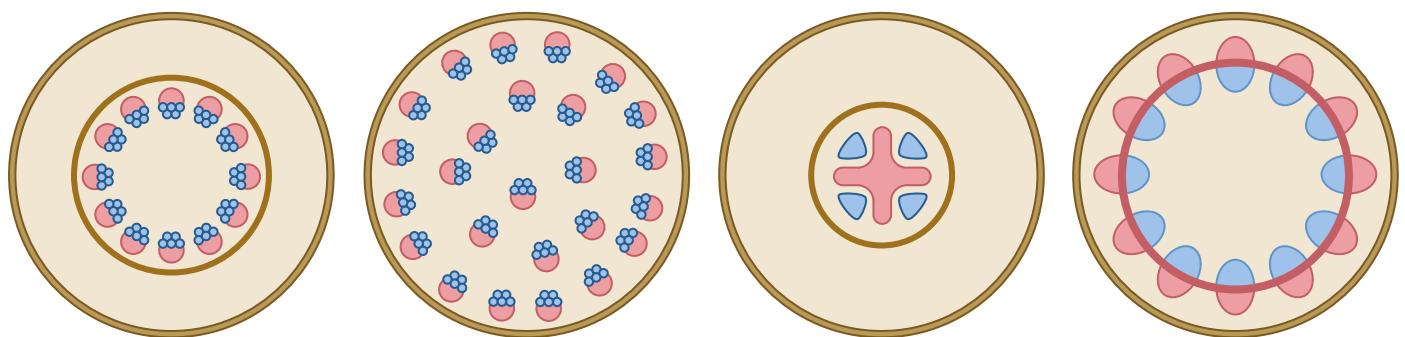
Explain the location of the mesophyll (palisade and spongy) and vascular bundle within the leaf

Palisade Mesophyll:

Spongy Mesophyll:

Vascular Bundle:

Identify the following plant tissues (monocot vs dicot ; root vs stem)



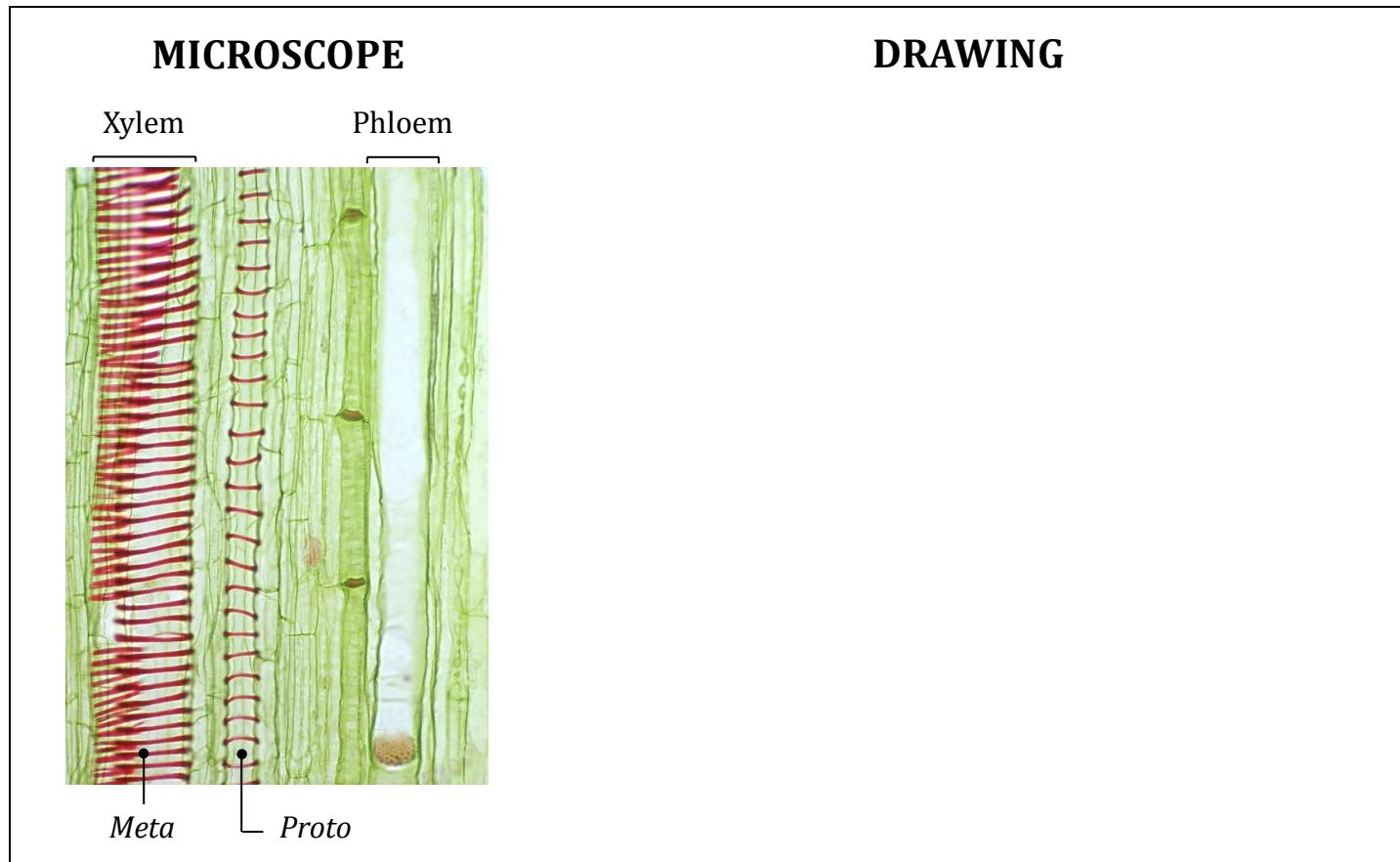
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Xylem Structure

Describe the structure of the xylem

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Draw the structure of primary xylem vessels in stems



Transpiration

Define transpiration

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.....
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Differentiate between fibrous and tap root systems

Fibrous:

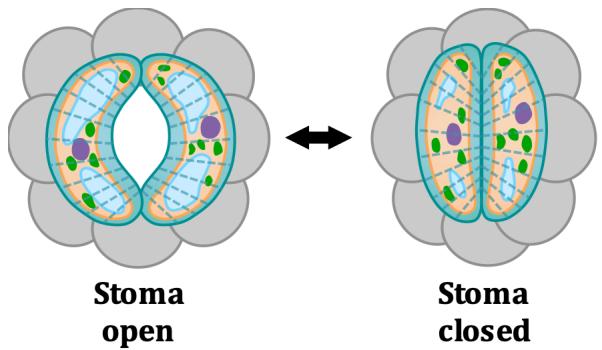
Tap:

Explain the uptake of mineral ions into the root by direct and indirect active transport

Direct Active Transport

Indirect Active Transport

Outline the role of stomata in regulating the level of evaporation from the leaf



Define cohesion and adhesion

Cohesion:

Adhesion:

Explain how water is transported around the plant via a transpiration stream

Explain how abiotic factors affect the rate of transpiration in a typical terrestrial plant

Light:

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Temperature:

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Wind:

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Humidity:

.....

Identify four adaptations in xerophytes and halophytes that help reduce or increase transpiration

	Xerophyte	Halophyte
Conditions
Issue
Adaptations	1. 2. 3. 4.	1. 2. 3. 4.

List three ways water transport can be modelled in xylem

1.
2.
3.

Describe how potometers can be used to measure transpiration rates

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